

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 18 MAY 2005

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To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2005/051042

International filing date (day/month/year)
25.03.2005

Priority date (day/month/year)
30.03.2004

International Patent Classification (IPC) or both national classification and IPC
G11B27/00, H04N5/783, G06F12/08

Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No I Basis of the opinion
- ☒ Box No II Priority
- ☐ Box No III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No IV Lack of unity of invention
- ☒ Box No V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement
- ☐ Box No VI Certain documents cited
- ☐ Box No VII Certain defects in the international application
- ☒ Box No VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/051042

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

Box No. II Priority

1. ☒ The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43*bis*.1 and 64.1) is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/B2005/051042

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2,11-14,24-27,29,34
	No: Claims	1,3-10,15-23,28,30-33,35-38
Inventive step (IS)	Yes: Claims	
	No: Claims	1-38
Industrial applicability (IA)	Yes: Claims	1-38
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

1. Reference is made to the following documents:

D1: US-A-6 128 712 (HUNT ET AL) 3 October 2000 (2000-10-03)
D2: WO 02/065299 A (THOMSON LICENSING SA; ABELARD, FRANCK) 22
August 2002 (2002-08-22)

Re Item V

2 INDEPENDENT CLAIMS

- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1, 15, 28 and 33 is not new in the sense of Article 33(2) PCT. Document D1 discloses (the references in parentheses applying to this document):

A playback apparatus for use in a reproducing system (see col. 1, lines 6-11) which includes a plurality of play modes (see col. 6, lines 29-34, Fig. 1 and Table 1: The apparatus can play QuickTime movie component, WAV- Audio Component, MPEG video etc. Therefore it has different play modes.), comprising:

a memory configured to store data to be read from a data source (see col. 2, lines 12-16; col. 8, lines 47-52 and col. 9, lines 14-16, Fig. 3, references 305 and 325: data read from CD-ROM 325 are stored in memory 305)

a presentation unit configured to retrieve one or more data blocks from the memory for presentation to a user (see col. 8, lines 52-56 and Fig. 3 references 310 and 315: The data blocks retrieved from RAM 305 are presented on display device 310 and audio device 315)

a controller configured to manage the contents of the memory and control the operations of said data source (see col. 8, line 66- col. 9, line 16, Fig. 3 reference 300: The CPU is the controller which

manages the contents of the memory and controls also CD-DOM 325 which is the data source), said controller comprising

a ranking unit operable to rank the desirability of at least two data blocks from among said plurality of data blocks (see col. 15, lines 16-39 and Table 10: As the CPU 300 is adapted to calculate the table with the priority factors for determining which resources and which segments are preloaded, there is a ranking unit which ranks the desirability of data blocks. The wording "segment" is another wording for "data block". In the example there are 7 segments. Therefore there are more than two data blocks.) wherein said desirability ranking is based on criteria comprising:

each of said at least two data blocks predicted future use in at least two of said plurality of play modes (see Col. 19, lines 39-46 and col. 22, lines 26-32, Table 1 Figures 7A and 7B: S1 and S2 represent two data blocks which are ranked according the probabilities in Fig. 7A and 7B. S1 contains according Table 1 a QuickTime video file, S2 contains a MPEG video file. Therefore also at least two play modes are involved when loading these segments and prioritizing the preload.) and the relative ranking of said at least two of said plurality of play modes (by ranking S1 and S2 according Figures 7A and 7B also the playmodes QuickTime and MPEG video are ranked)

- 2.2 The subject-matter of claim 15 differs from claim 1 in that the extrapolations are interleaved. As far as this expression can be understood, document D1 shows in Fig. 7G, that the extrapolations of the probability to preload block S7 or block S4 or block S3 are several times taken into account in the graph. Blocks S3 and S4 involve different play modes according Table 1. Therefore the extrapolations also are "interleaved" in D1. Hence the subject-matter of claim 15 is not novel with respect to

D1.

- 2.3 The subject-matter of method claim 28 focuses only on the feature of predicting and ranking the future use of the play modes of apparatus claim 1. As the subject-matter of claim 1 is not novel, also the subject-matter of claim 28 is not novel.
- 2.4 The subject-matter of method claim 33 focuses only on the extrapolation features of apparatus claim 15. As the subject-matter of claim 15 is not novel, also the subject-matter of claim 33 is not novel.
3. Dependent claims
- 3.1 The subject-matter of claims 2, 29 and 34 is not inventive according Article 33(3) PCT. Document D2 also shows a cache management for a system like that of D1 especially for the trick mode case. D2 discloses on page 10, lines 24-27, that the time when the image has to be displayed is a basis for managing the cache. Therefore the time of the future use of an image is predicted by the time-based reference of the image.
- 3.2 By analysing the probabilities to load certain segments in D1, Figures 7A to 7G the probabilities to change the play modes (e.g. from Quick Time to MPEG or to WAV) implicitly are analysed. Therefore the subject-matter of claims 3, 16, 30 and 35 is not novel.
- 3.3 According to D1, col. 26, lines 44-47 the usage patterns are taken into account for analysing the probabilities. Therefore the subject-matter of claims 4-6, 17-19, 31, 32 and 36-38 is not novel.
- 3.4 The subject-matter of claim 7 and 20 is not novel as the CPU of D1, Fig. 3 as a disc control unit is configured to load the data segments with the highest desirability ranking.
- 3.5 The subject-matter of claims 8, 9, 21, 22 is not novel as according D1, col. 16, lines

33-46 data blocks stored in the memory that have a lower priority than data blocks to be loaded in the memory are deleted.

- 3.6 The subject-matter of claim 10 and 23 is not novel for the same reasons as stated in section 3.4 of this communication.
- 3.7 In dependent claims 11-14 and 24-27 slight constructional changes are defined which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can readily be foreseen. Consequently, the subject-matter of these claims also lacks an inventive step.

Re Item VIII

4. Although apparatus claims 1 and 15 and method claims 28 and 33 have been drafted as separate independent claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.
5. The subject-matter of claims 15 and 33 does not meet the requirements of Article 6 PCT. The wording "interleaving extrapolations" is vague and unclear. The question is how one can interleave e.g. an extrapolation for a data block A and a data block B?